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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,513	08/02/2006	Stuart Brian William Kay	604-780	8424
23117 7590 05/10/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
GRAY, PHILLIP A				
ART UNIT		PAPER NUMBER		
3767				
MAIL DATE		DELIVERY MODE		
05/10/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,513

Applicant(s)

KAY ET AL.

Examiner

Phillip Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to applicant's communication of 2/1/2010.
Currently claims 1-11 are pending and rejected below.

Response to Arguments

Applicant's arguments filed 2/1/2010 have been fully considered but they are not persuasive. The elements disclosed in LUND are fully capable of satisfying all structural, functional, spatial, and operational limitations in the amended claims, as currently written, and the rejection is made and proper. Applicant's argue that the seal formation is not "at the end face" of the plunger. It is examiner's position that the term "at" means:

1.
 - a. In or near the area occupied by; in or near the location of: *at the market; at our destination.*
 - b. In or near the position of: *always at my side; at the center of the page.*
2. To or toward the direction or location of, especially for a specific purpose: *Questions came at us from all sides.*

It is examiner's position that the seal formation (42) is provided "at" the end face of plunger 32, as shown in figures 4 and 6, since it is "near the area occupied by" and "near the position of" the end face; further it is towards the direction and location of the end face.

Concerning the claim limitation of "whereby when foam enters the syringe barrel, flow of foam pushes the syringe plunger back in the syringe barrel as the syringe barrel fills with foam", it is examiners position that this is a functional claim limitation. It is

further examiner's position that LUND prior art would perform this function because as the two chemicals mixed there viscosity and density would change causes them to harden and this would move the plunger head during this mixing, and also when connected to the seal formation.

It is strongly recommended applicant greater define the exact spatial and structural relationship of the seal formation and the plunger end face (or front face), if that is where the applicant feels there novelty lies (i.e. seal formation formed integral, abuts, connected to, etc.). It is further recommended that applicant further define what surface of the plunger is the end face (proximal or distal), if that is where the novelty lies.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

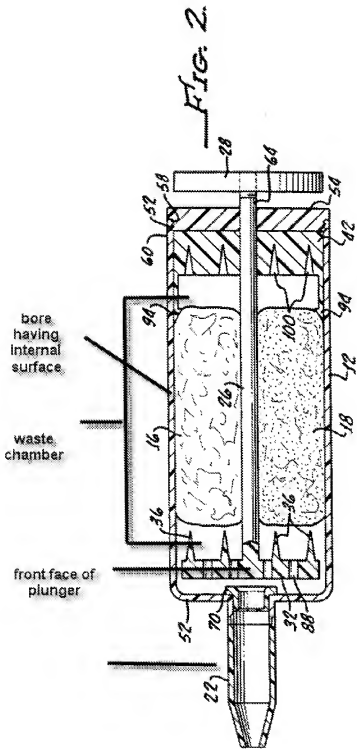
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

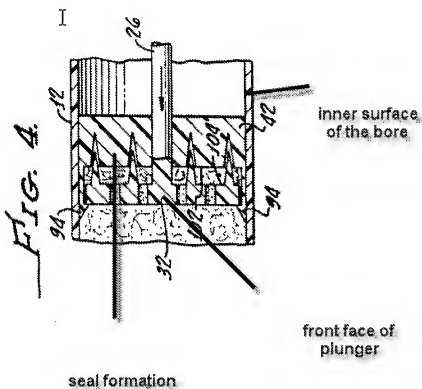
Claims 1-11 rejected under 35 U.S.C. 102(b) as being anticipated by Lund (U.S. Patent 5,273,190). Lund discloses a syringe for dispensing foam (see abstract and paragraph at column 1 lines 15-25) comprising a syringe plunger with front face(32),

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and end face opposite of the front face side surface, with a waste chamber (interior space which components 16 and 18 are contained in), a syringe barrel (12) with a nozzle (22) and bore (internal cavity and internal surface of 12), a seal formation (42) for sealing between the front face of plunger and said inner surface of the bore. See figure 2 and figure 4 marked up below.



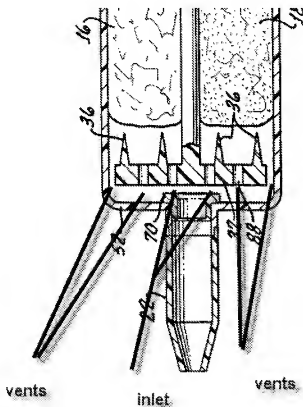
Concerning claim 1 and seal formation.



Concerning claim 2 and vents note area around plunger face 32 or holes 88 as shown in figure 2.

Concerning claim 3 note flexible walls (top portion of 42). Concerning claims 4-5 note chamber is substantially empty of air (fig 2) and retained within a rigid wall chamber/frame (unit as shown in figure 3 and wall portions 54 and syringe barrel walls

12). Concerning claim 6 it is examiners position that element 42 is a flexible wall within the device but substantially inextensible (incapable of being extended or stretched), Element 32 is of a finite size and does not expand or stretch. Concerning claim 7 note inlets (inner most 88). Concerning claim 8 see marked up lower part of figure 2 below.



Concerning claims 9-10 and kit source of foam as gas and liquid note elements 16 and 18 pressurized liquid/gas. Concerning the method with the steps of connecting

the syringe to the foam (figure 2) dispensing a flow of foam into the syringe (figure 5), whereby the flow of foam initially enters the chamber (also shown in figure 5) and the flow of foam pushes the plunger back in the barrel and fills syringe (figure 6).

It is examiners position that the contents of 16 and 18 are sealed from the area outside for the front face of the plunger, "thereby preventing flow of foam past the front face of the plunger" see figure 2. Further note various holes or vents internal waste chamber (100, area before 100, 88, space outside of 32 around 104, outside opening near 58, ect.).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gray whose telephone number is (571)272-7180. The examiner can normally be reached on Monday through Friday, 8:30 a.m. to 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Simons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Phillip Gray/
Examiner, Art Unit 3767

/Melba Bumgarner/
Primary Examiner, Art Unit 3767